



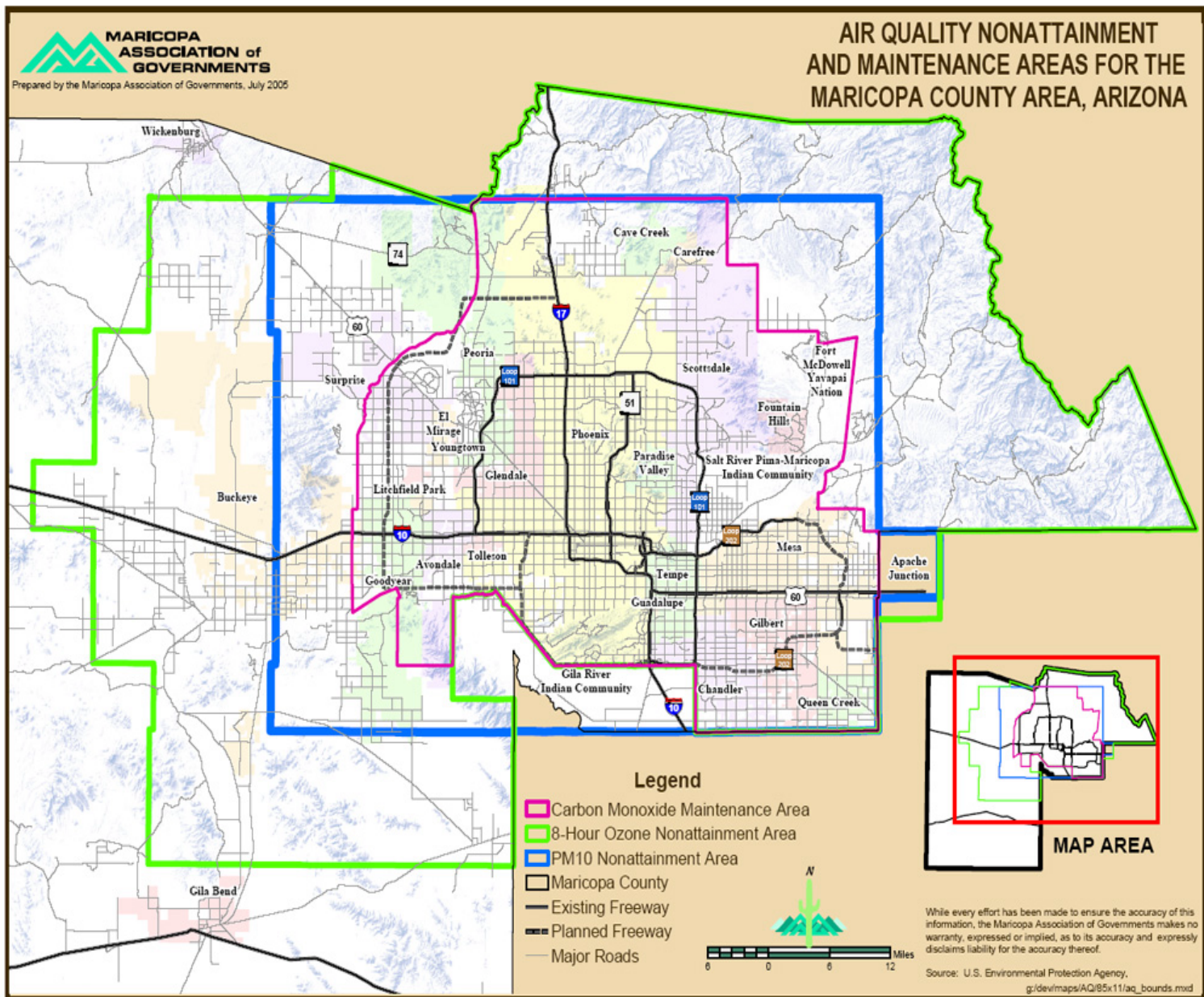
# FIVE PERCENT PLAN FOR PM-10 FOR THE MARICOPA COUNTY NONATTAINMENT AREA

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## **Agricultural Best Management Practices Committee**

**June 27, 2006**

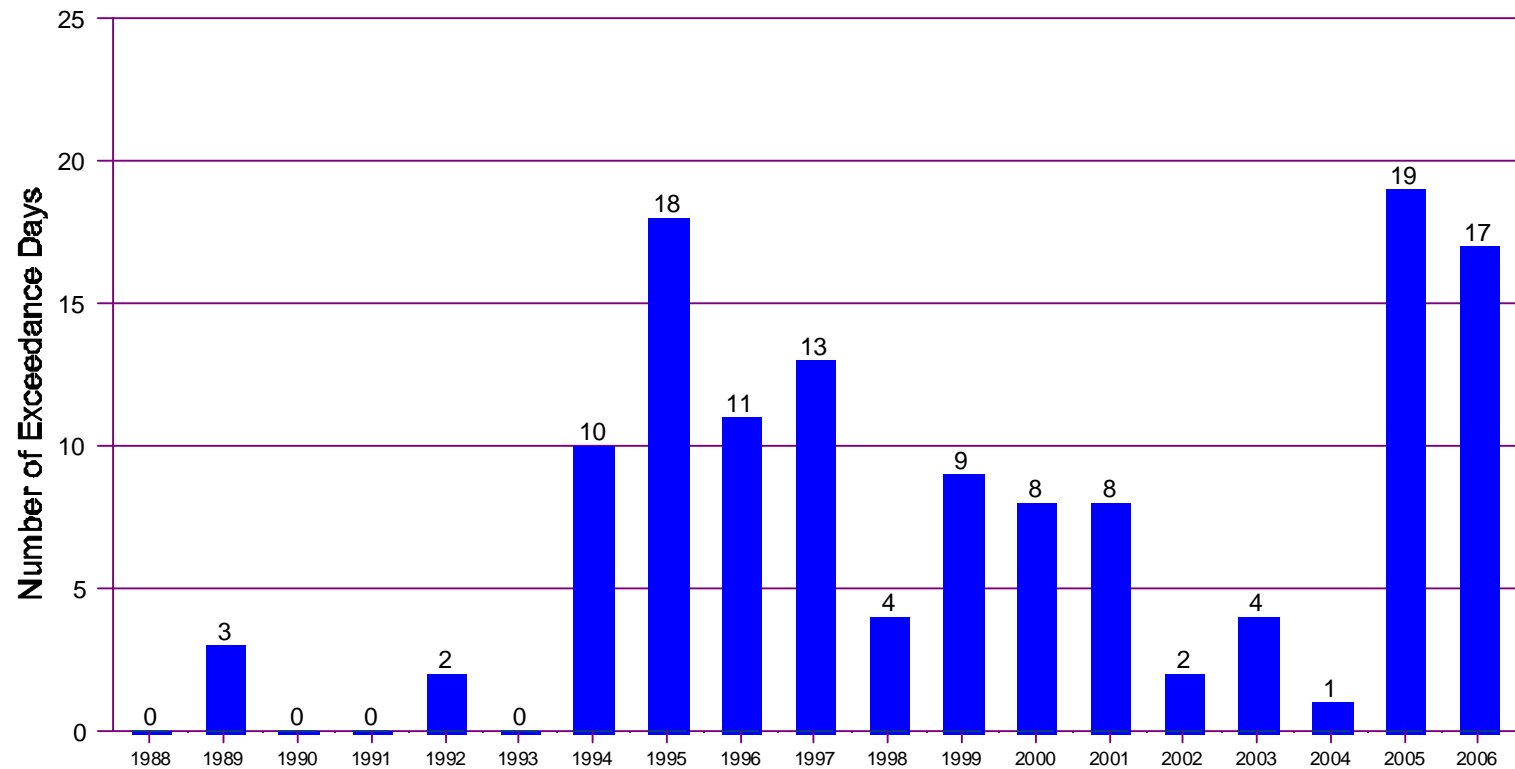






# PM-10 Monitoring Data

## EXCEEDANCES OF THE 24-HOUR PM-10 STANDARD IN THE MARICOPA COUNTY NONATTAINMENT AREA



Notes:

1. The 2006 data have not been validated by the Maricopa County Air Quality Department and, therefore, is preliminary and subject to change.
2. Monitoring data for 2006 is through June 22, 2006

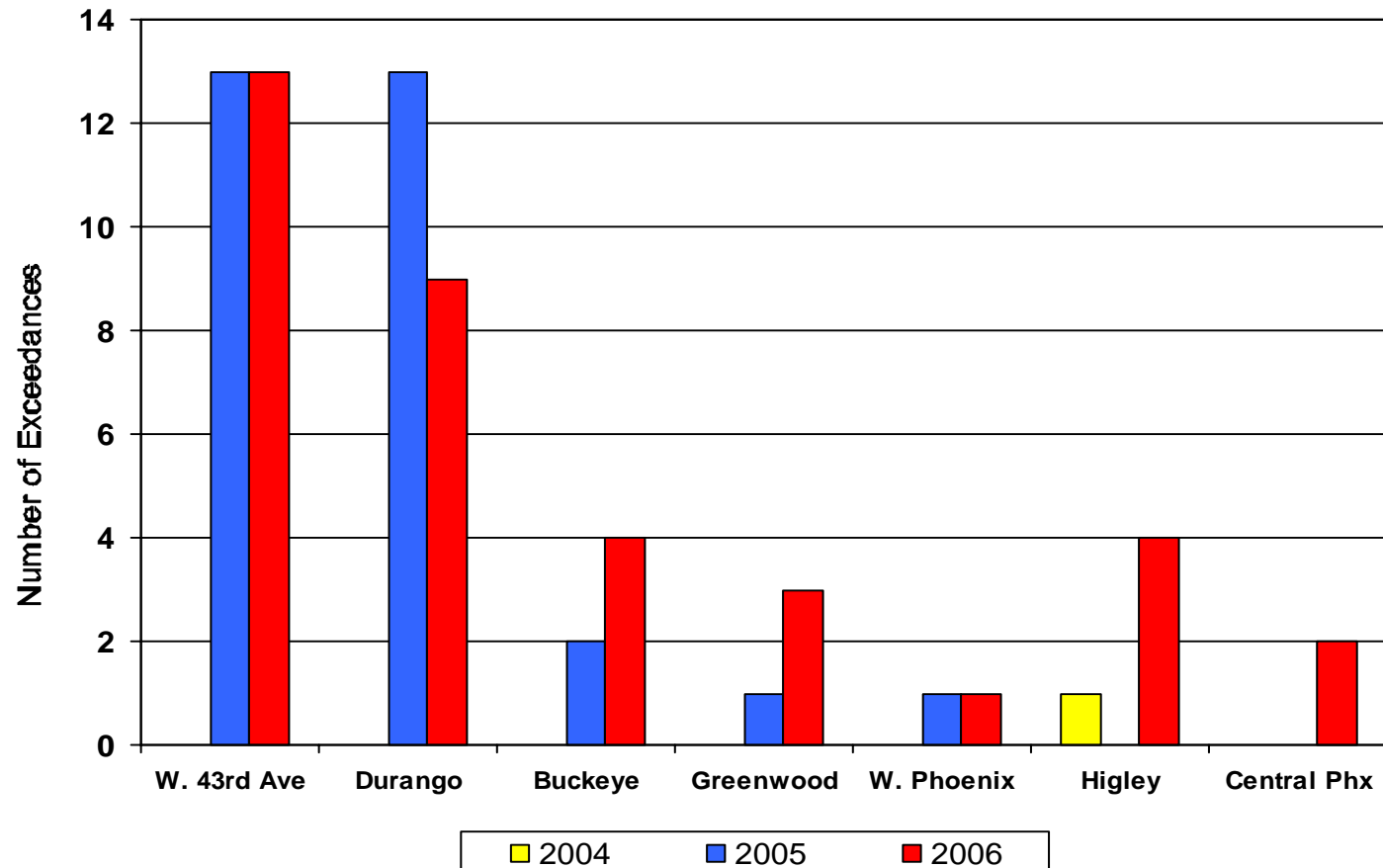






# PM-10 Monitoring Data

## EXCEEDANCES OF THE 24-HR PM-10 STANDARD BY MONITOR IN THE MARICOPA COUNTY NONATTAINMENT AREA



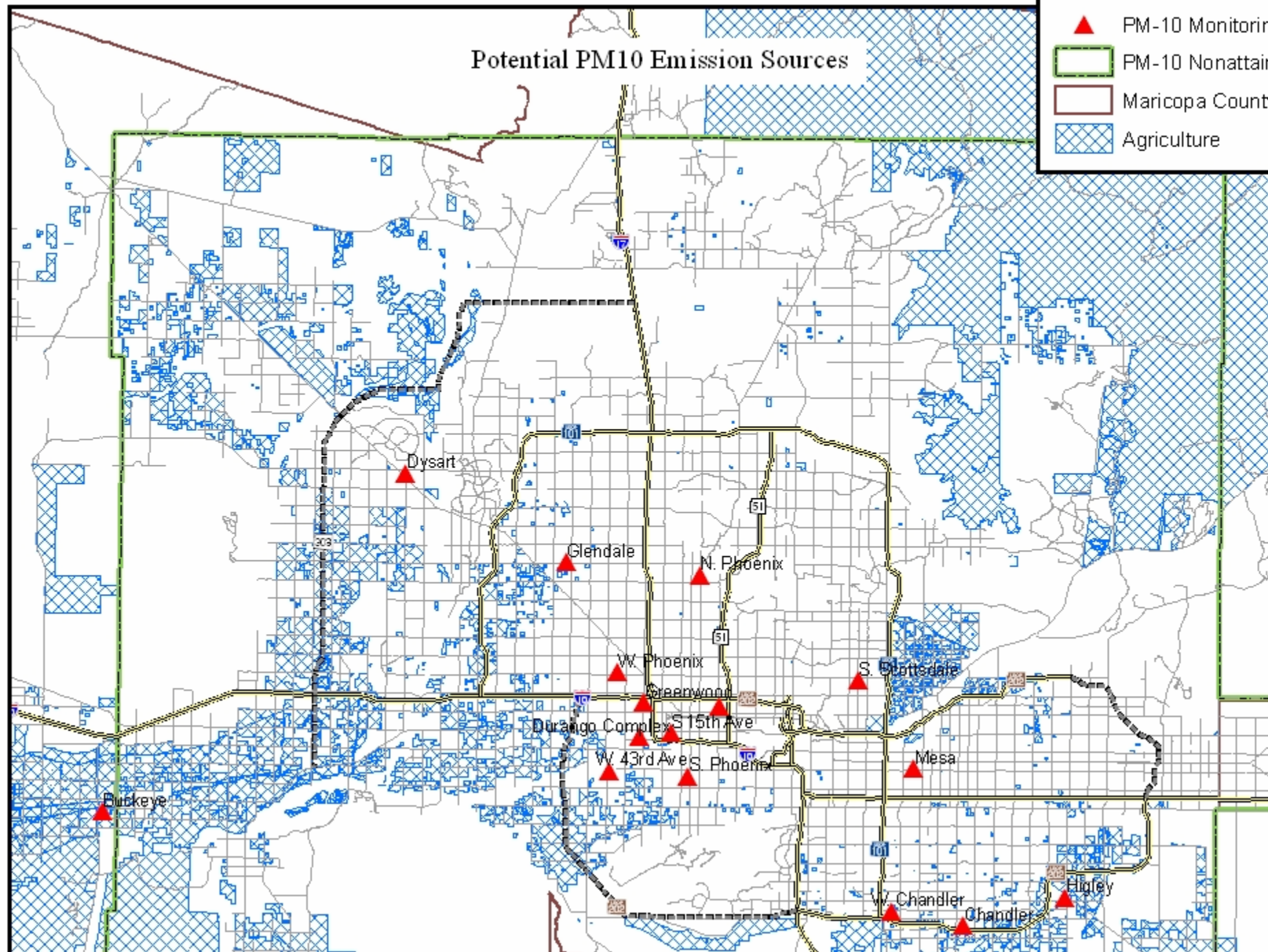
Notes:

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# Potential PM10 Emission Sources

- ▲ PM-10 Monitorin
- PM-10 Nonattain
- Maricopa County
- Agriculture





## Five Percent Plan for PM-10

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- Required by Clean Air Act Section 189(d)
- Due to EPA by December 31, 2007
- 5 percent reduction in emissions per year until PM-10 standard is attained
- Based upon most recent emissions inventory (2005)
- Demonstrate attainment via modeling
- 3 years of clean data needed at all PM-10 monitors to attain the standard
  - Earliest: 2007, 2008, and 2009





# 2006 Regional PM-10 Emissions with Committed Control Measures

## (Percent of Total Emissions)

**Area Sources 20.2%**

- Disturbed Vacant Land and Agricultural Windblown Dust 12.4%
- Agricultural Dust 2.9%
- Other Area Sources 3.9%
- Residential Wood Burning 1.0%

**Point Sources 2.5%**

**Nonroad Sources 32.1%**

- Construction/Earth Moving Dust 14.5%
- Construction Trackout 8.2%
- Nonroad Engine Exhaust 7.8%
- Construction Windblown Dust 1.6%

Source: MAG Serious Area PM-10 Plan,  
February, 2000.

**Onroad Sources 45.2%**

- Paved Road Dust 31.2%
- Unpaved Road Dust 11.9%
- Onroad Vehicle Exhaust 2.1%







# 2006 PM-10 Emission Reductions

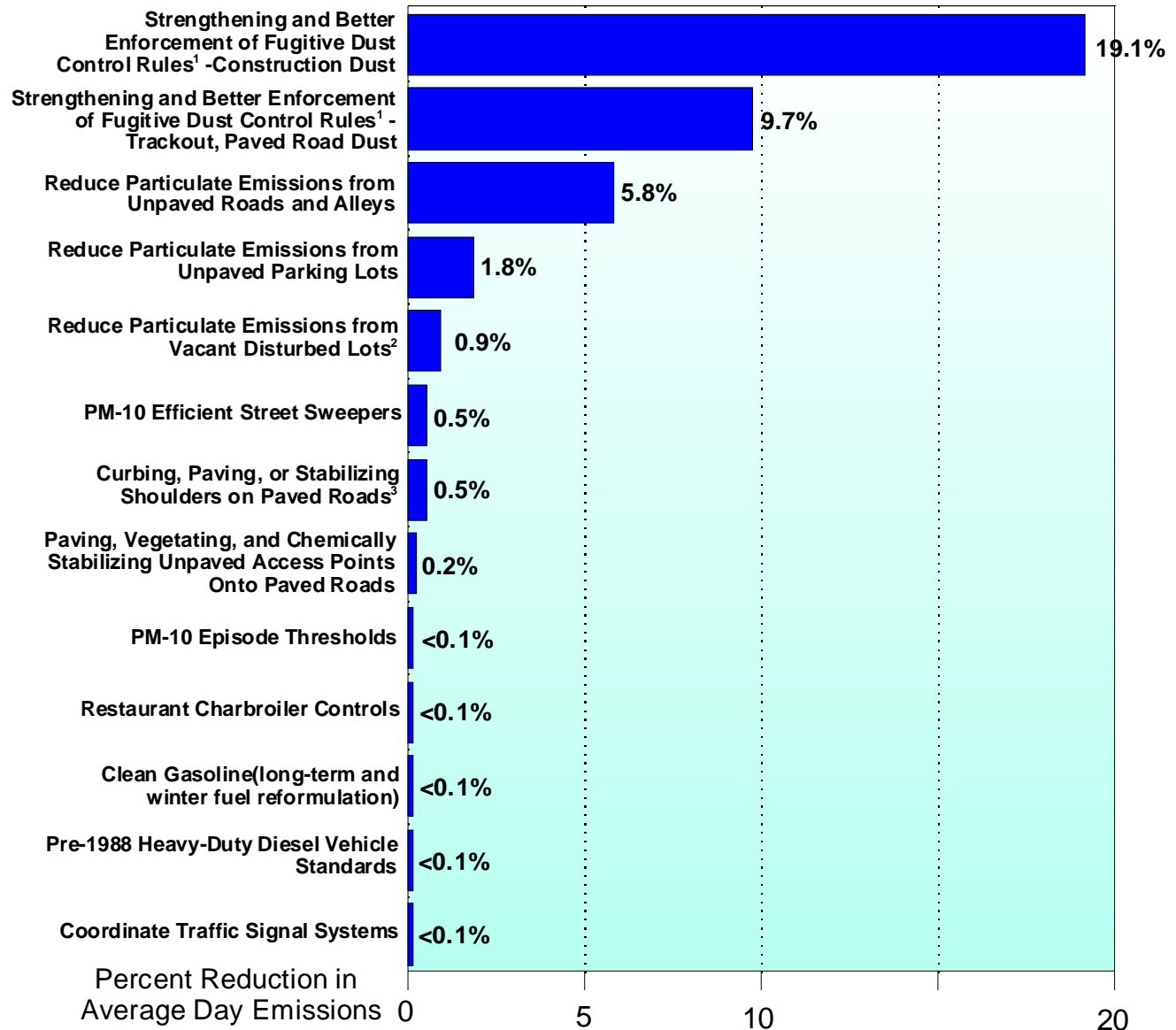
## From Committed Control Measures

### NOTES:

<sup>1</sup>In addition, the emission reduction includes Dust Control Plans for Construction/Land Clearing and Industrial Sites

<sup>2</sup>In addition, the emission reduction includes Dust Abatement and Management Plan for State Lands

<sup>3</sup>In addition, the emission reduction includes Reduce Particulate Emissions from Unpaved Shoulders on Targeted Arterials

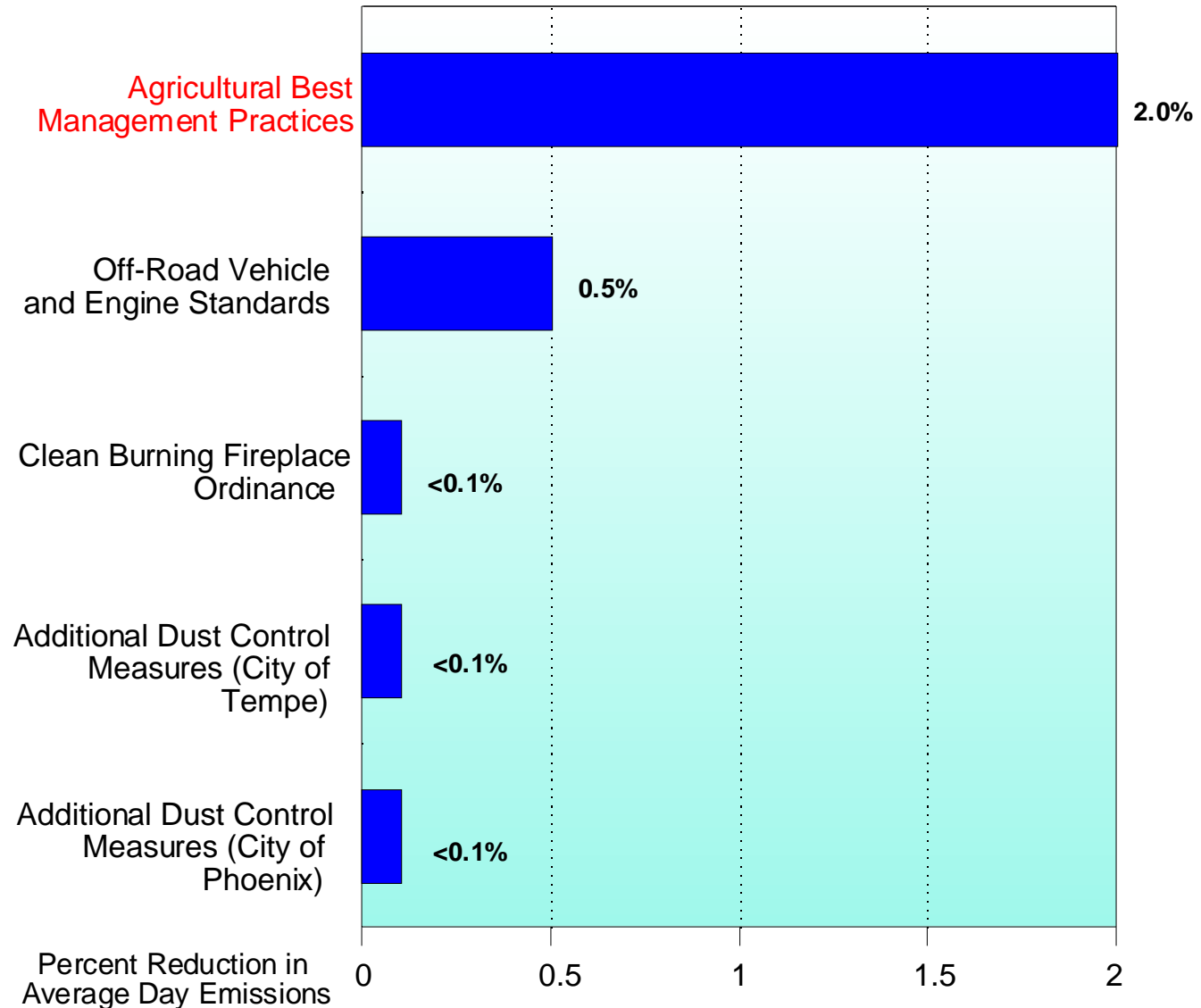






# 2006 PM-10 Emission Reductions

## From Contingency Control Measures





# Five Percent Plan for PM-10 Tentative Schedule

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- Feb 2007 - Emissions and dispersion modeling
- Feb-Mar 2007 - Suggested List of Measures for consideration
- Jun 2007 - Commitments to implement measures
- Sep 2007 - Document available
- Oct 2007 - Public hearing
- Oct 2007 - AQTAC recommendation
- Dec 2007 - Regional Council action
- Dec 2007 - Submit to ADEQ/EPA





# Clean Air Act Sanctions

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- **Sanctions imposed for**
  - Failure to submit plan
  - Failure to implement any plan requirement
  - Failure to make any required submission
  - EPA disapproval of plan
- **Sanctions timeline**
  - 18 months - Tighter controls on major industries (2 to 1 offsets in emissions)
  - 24 months - Loss of federal highway funds and federal implementation plan







# Failure to Attain the Standards

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- **Continue to add more measures to reduce emissions by 5 percent per year until attainment is achieved, as measured by the monitoring data**
- **Best Course of Action - Attain the standards as quickly as possible**





# EPA Proposes New Particulate Standards in January 2006

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- **Stricter fine particulate standard**
- **New coarse particulate standard**
  - Exemptions for rural windblown dust, agriculture, and mining
- **Revoke annual PM-10 standard**
- **Revoke 24-hour PM-10 standard EXCEPT in areas with violating monitors and population of 100,000+**
  - **24-hour PM-10 standard will remain in place until July 2013 for this region**
- **Legal challenges of new particulate standards are likely to occur**





# Recent Actions to Reduce PM-10

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- **Observations at monitors by ADEQ, Maricopa County, and MAG**
- **Phoenix and Maricopa County have stepped - up dust control in hotspot areas**
  - Daily street sweeping pilot test
  - Dust suppressants and no parking signs on unpaved shoulders
  - Police enforcement of speed limits, parking on shoulders, and passing
  - Unpaved parking lot enforcement
  - Intersection improvements
  - County Air Quality staff estimate that the above efforts reduced PM-10 by about 20 ug/m<sup>3</sup> (13% of standard)
- **Peoria approach for dust control sent to MAG member agencies**







# Recent Actions to Reduce PM-10

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- **MAG workshop on model dust control ordinance and best practices on February 10, 2006**
  - Peoria, Phoenix, Mesa approaches
  - Maricopa County offered to train city staff to observe dust control violations and report them to the County
- **Agricultural Best Management Practices Committee meeting on April 17, 2006**
  - Will consider additional measures





# For more information

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**[www.mag.maricopa.gov](http://www.mag.maricopa.gov)**

